

L2 ANSWER 1 OF 2 USPATFULL

ACCESSION NUMBER: 2002:40087 USPATFULL
TITLE: Nucleic acid encoding delta-9 desaturase
INVENTOR(S): Zwick, Michael G., Loveland, CO, United States
Edington, Brent E., Boulder, CO, United States
McSwiggen, James A., Boulder, CO, United States
Merlo, Patricia Ann Owens, Carmel, IN, United States
Guo, Lining, Brownsburg, IN, United States
Skokut, Thomas A., Carmel, IN, United States
Young, Scott A., Indianapolis, IN, United States
Folkerts, Otto, Carmel, IN, United States
Merlo, Donald J., Carmel, IN, United States
PATENT ASSIGNEE(S): Ribozyne Pharmaceuticals, Inc., Indianapolis, IN,
United States (U.S. corporation)
DowElanco, Boulder, CO, United States (U.S.
corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6350934	B1	20020226
APPLICATION INFO.:	US 1996-679645		19960712 (8)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1994-300726, filed on 2 Sep 1994		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-1135	19950713 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Fox, David T.	
ASSISTANT EXAMINER:	Kubelik, Anne R.	
LEGAL REPRESENTATIVE:	McDonnell Boehnen Hulbert & Berghoff	
NUMBER OF CLAIMS:	11	
EXEMPLARY CLAIM:	2	
NUMBER OF DRAWINGS:	45 Drawing Figure(s); 44 Drawing Page(s)	
LINE COUNT:	8621	

AB The present invention relates to nucleic acid molecules encoding delta 9 desaturase gene, and expression vectors, plant cells, and transgenic plants expressing delta 9 desaturase nucleic acid. The nucleic acid molecules of the present invention can be used, for example, to decrease delta 9 desaturase activity in plant cells, resulting in decreased unsaturated fatty acid production.

DETD . . . sib-pollinations were given the highest priority, however, when this was not possible, cross-pollinations were made using the inbreds CQ806, CS716, **OQ414**, or HO.sub.1 as pollen donors, and occasionally as pollen recipients. Over 715 controlled pollinations have been made, with the majority. . .

DETD . . . had high stearate content (FIG. 36). The reduction was comparable to R0 maize leaves. This reduction was observed in either **OQ414** plants crossed with RPA85-15 pollcn or RPA85-15 plants crossed with self or siblings. Therefore, this suggests that the gene encoding. . .

DETD . . . High with High
Cross Leaf Stearate Leaf Stearate Stearate

RPA85-15.06 .times. RPA85-15.12 6 3 33%

RPA85-15.07 self 5 5 50%

RPA85-15.10 self 8 2 20%

OQ414 .times. RPA85-15.06 5 3 38%

OQ414 .times. RPA85-15.11 6 4 40%

L2 ANSWER 2 OF 2 USPATFULL

ACCESSION NUMBER: 2001:231398 USPATFULL

TITLE: Acyl-ACP thioesterase nucleic acids from maize and methods of altering palmitic acid levels in transgenic plants therewith

INVENTOR(S): Rubin-Wilson, Beth, Indianapolis, IN, United States
Guo, Lining, Brownsburg, IN, United States
Skokut, Tom, Carmel, IN, United States
Young, Scott, Indianapolis, IN, United States
Folkerts, Otto, Guilford, CT, United States
Armstrong, Katherine, Zionsville, IN, United States
Cowen, Neil M., Zionsville, IN, United States

PATENT ASSIGNEE(S): Dow AgroSciences LLC, Indianapolis, IN, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6331664	B1	20011218
APPLICATION INFO.:	US 1998-64411		19980422 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1997-45827	19970505 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Nelson, Amy J.	
LEGAL REPRESENTATIVE:	Stuart, Donald R., Boruki, Andrea T.	
NUMBER OF CLAIMS:	16	
EXEMPLARY CLAIM:	1	
LINE COUNT:	2566	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Genes encoding maize oleoyl-ACP and palmitoyl-ACP thioesterase enzymes have been isolated from maize. These genes, when expressed in a plant, can be used to create transgenic plants having altered palmitic acid oil profiles.

DETD The two plasmids, pGGN61-1 and pGGN62-2, were tested for transient expression in immature zygotic embryos using the proprietary inbred line, **OQ414** (Mycogen Seeds). For testing expression, embryos 12-14 DAP were isolated and cultured on 15Ag10 medium (Chu, C. (1978) The N6. . . .